



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/588,701	08/08/2006	Takahiro Maruyama	0038-0496PUS1	2436
2292	7590	03/21/2008	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				MOK, ALEX W
ART UNIT		PAPER NUMBER		
2834				
			NOTIFICATION DATE	DELIVERY MODE
			03/21/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/588,701	MARUYAMA ET AL.	
	Examiner	Art Unit	
	ALEX W. MOK	2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 12 December 2007.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-12 is/are pending in the application.

4a) Of the above claim(s) 5-12 is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-4 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 12 December 2007 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5) Notice of Informal Patent Application

6) Other: _____.

DETAILED ACTION

Amendment

1. Acknowledgement is made of Amendment filed December 12, 2007.
2. Acknowledgement is made of the amendments to the specification and the drawings submitted in the Amendment filed December 12, 2007.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
4. Claims 1 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katakura et al. (US Patent No.: 5241229), and further in view of Maue et al. (US Patent No.: 6075298).

For claim 1, Katakura et al. disclose a motor comprising a stator core enclosing a space and being constituted by coils (reference numerals 18, 19, see figure 1), which are respectively wound on stator teeth; and a motor shaft (reference numeral 14) being provided in the space, equipped with a rotor magnet (reference numeral 17) and rotatably held by a motor case (reference numerals 11, 12), wherein one axial end surface of said stator core is butted against an inner wall surface of said motor case (see figure 1). Katakura et al. do not disclose one end of the motor shaft including a worm section connected to a speed reduction unit, and an opposite end of the motor

shaft being held by a thrust holder provided to a lid, wherein the motor shaft is inserted into said motor case, with the worm section leading, and pierces through the stator core, said stator core being urged toward one axial end surface side from an opposite axial end surface side, and said stator core being fixed in said motor case by fitting the lid in the opening section of said motor case.

Maue et al. disclose a motor with a motor shaft including a worm section (reference numeral 38, figure 2) connected to a speed reduction unit (see figure 2), and an opposite end of the motor shaft being held by a thrust holder (figure 2) provided to a lid (reference numeral 24), and the worm section going through the stator (figure 2).

It would have been obvious to include the worm section on the motor shaft and the speed reduction unit as taught by Maue et al., since the invention of Maue et al. is also related to motor drive devices for powering windows (see column 1, lines 5-20), and a person of ordinary skill would have been able to include these techniques in the invention of Katakura et al. for the purpose of efficiently assembling the device and reducing its size. It also would have been obvious to a person of ordinary skill to urge the stator core toward an axial end surface side and fitting the lid on the motor case, since this technique would be necessary to secure the stator core to the case and reduce noise.

For claim 4, the invention of Katakura et al. is a brushless motor attached to the case (see figures 1, 2).

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Katakura et al. and Maue et al. as applied to claim 1 above, and further in view of Cazal et al. (US Patent No.: 5629575).

For claim 2, the inventions of Katakura et al. and Maue et al. teach the claimed invention except for the elastic member sandwiched between the opposite axial end surface of said stator core and said lid. Cazal et al. teach a similar technique in which elastic members (reference numeral 62, figures 2, 3) are positioned between the end of the stator and a lid-like portion (reference numerals 66, 54). It would have been obvious to have this type of configuration in the references of Katakura et al. and Maue et al., since Cazal et al. disclose an equivalent means for the elastic member for an electrical machine, and a person skilled in the art would have been able to include this technique for the purpose of absorbing the vibrations and reducing the noise.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Katakura et al. and Maue et al. as applied to claim 1 above, and further in view of Miller et al. (US Patent No.: 6069423).

For claim 3, it would have been obvious to fit the lid on the motor case by snap-fitting, since this technique is already well known in the art, as exhibited by Miller et al. (see column 3, lines 1-6), and a person of skilled in the art would have easily been able to apply this technique for the purpose of easily attaching the motor in the case and efficiently assembling the device.

Response to Arguments

7. Applicant's arguments with respect to claims 1-4 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX W. MOK whose telephone number is (571)272-9084. The examiner can normally be reached on 7:30-5:00 Eastern Time, 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren E. Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Alex W. Mok
Examiner
Art Unit 2834

AM

/Darren Schuberg/
Supervisory Patent Examiner, Art Unit 2834